Natural Resources and Environment Programs-II

USDA/CSREES Grantsmanship Workshop

Natural Resources and Environment Programs-II

Program Name	**National Program Leader**	**Program Specialist**
Global Change	Luis Tupas/Nancy Cavallaro	Alexandra Raver
Managed Ecosystems	Diana Jerkins	Alexandra Raver
Weedy & Invasive Species	Michael Bowers	Alexandra Raver

Global Change and Climate

2006-2007 Goals & Priorities

- Research applications to establish cause and effect relationships between climate changes and the abundance and distribution of invasive species, and the impact these species have on agroecosystems and land use/land cover.
- Enhance decision support tools used by operational agencies to respond to the influence of global change and climate on invasive species.

Global Change and Climate

Objectives of 2006-7 Request for Applications

- Understand and/or address how climate change and variability and land use change:
  1. influence the establishment, abundance and distribution of invasive species;
  2. interact with invasive species to create feedbacks that increase their success;
  3. interact with invasive species to cause threshold responses in natural and managed systems; and
  4. affect the chemical, biological and mechanical management of invasive species.

Global Change and Climate

Significant Changes For FY 2006-2007

- Joint RFA with EPA and NASA
- Submission to EPA
- $150,000 – 200,000 per year for up to three years, maximum request $600,000
- NASA will award grants in the range of $100,000 to $200,000 per year to supplement proposals that address the needs or either EPA or USDA.

Global Change and Climate

Funding Year	2004 Carbon cycle	2005 Land Use
# of proposals	56	31
# of proposals awarded	12	9
% success	21%	29%
Average award size (standard)	$500,000	$400,000
Average award duration	3 years	3 years

Managed Ecosystems

Goals & Priorities -2006

Research

- Basic biogeochemical functional level – How does the system work?
- Multi-functional management level – How to integrate agroecosystem functions?
- Quantify system outputs – Is the agricultural production and environmental conditions improving due to management changes?

Integrated

- Develop, disseminate, and train on use of multifunctional management strategies.

Managed Ecosystems

Significant Changes For FY 2007

- Letter of Intent Required for FY 2007
- Develop predictive, *multifunctional* agroecosystem management methods that will concurrently:
  1. Optimize resource use efficiency while
  2. Increasing product quality and Environmental quality
  3. Develop indicators for land resource use assessment – market valuation

Managed Ecosystems

Funding Year	2005	2006
# of proposals	110	73
# of proposals awarded	11	17
% success	10	23
Average award size (standard)	428,000	334,034
Average award duration	3.2 yrs	3.4 yrs

% success calculated for all projects (standard research, integrated, Post-Docs, and strengthening)

Biology of Weedy and Invasive Species in Agroecosystems

Goals & Priorities:

- The program will consider activities (research and integrated) that focus on the biology of weedy and invasive plant and animal species of economic importance to agriculture.
- The activities proposed should have direct and obvious relevance to the elimination, management or control of invasive species in agroecosystems including cropping systems, managed forests, or rangeland.
- Successful proposals will establish links between fundamental biological or ecological relationships and invasive species management plans and strategies.

Biology of Weedy and Invasive Species in Agroecosystems

Letter of Intent Required in FY 2007 (due December 6)

Priorities for Research FY 2007

Relationships between the abundance of invasive species and different cultivation and nutrient management regimes, disturbance (including fire, pests and grazing), and other landscape features (presence of roads, degree of fragmentation) and/or processes (source-sink population dynamics)

Priorities for Integrated Activities (those that combine research, education, and/or extension) FY 2007

- Development of ecologically-based, invasive species management programs and/or strategies
- Development of early detection–rapid response control strategies, especially those that use remote sensing and mapping.

Biology of Weedy and Invasive Species in Agroecosystems

Funding Year	2005	2006
# of proposals	82	70
# of proposals awarded	10	10
% success	12	14.3
Average award size (standard)	337,517	313,504
Average award duration	3.33 yrs	3.25 yrs

2007 NRI Electronic Submission

- The NRI is **requiring** electronic submission in FY 2007 through Grants.gov.

- All attachments **MUST** be in PDF format.